

# PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

# PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category: Small-sized Project/Programme

Country/ies: Indonesia

Title of Project/Programme: Developing Community Resilience to Adapt to

Climate Change in Maratua

Type of Implementing Entity: National Implementing Entity

Implementing Entity: Kemitraan

Executing Entity/ies: Yayasan JAVLEC Indonesia

(JAVLEC Indonesia Foundation)

Pokja REDD Berau

(REDD Working Group of Berau)

Amount of Financing Requested: USD 946,287

(in U.S Dollars Equivalent)

# **Project / Programme Background and Context:**

Global warming has caused climate change phenomenon all over the world-which can not easy to be estimated. On the other side, climate and its changes are the most factors that give impact toward the occur of disasters-whether the frequency of cases (quantity) and the risk level of disasters (quality). BNPB recorded that the disasters triggers since 1815 until 2016 are dominated by factors which relate to climate condition-that is about 94 %, and the rest is geological disasters and caused by human. Flood is in the first position-that is 35 %, then followed by hurricane (24 %), landslide (20 %), and drought (9%).

As a developed country, the Indonesian community adaptation ability level has not satisfied. The less of the community adaptation ability will contribute toward the increase of disaster risk which felt. Beside the capacity of adaptation, disaster vulnerability is also caused by indicators which influence level of exposure and level of sensitivity. Those indicators relate to the biophysics condition, environment, and social & economy condition.

According to SIDIK (Sistem Informasi Indeks Kerentanan-Vulnerability Index Information System)-which issued by Ministry of Forestry and Environment (KLHK) in 2015, East Kalimantan is a quite vulnerable province. This province has 44 villages with very vulnerable category or 5.0 %. Based on disaster risk index which issued by BNPB in 2013, Berau-as the project site target-is a district/city in East Kalimantan that has the highest disaster risk indexthe score is 202.

<sup>&</sup>lt;sup>1</sup> Source: www.bnpb.go.id –access date: December 19, 2016.

<sup>&</sup>lt;sup>2</sup> Directorat of Climate Change Adaptation –Directorat General of Climate Change.

# The number of villages based on the vulnerability level of East Kalimantan province and District/city of project target

| Onevines /District /Pity | Level of Vulnerability |     |     |   |    | TOTAL |
|--------------------------|------------------------|-----|-----|---|----|-------|
| Province/District/City   | 1                      | 2   | 3   | 4 | 5  | TUTAL |
| East Borneo              | 84                     | 610 | 139 | 3 | 44 | 880   |
| Berau                    | 8                      | 87  | 14  | - | 3  | 112   |

Processed from: The Ministry of Forestry and Environment (2015)

Disaster Risk Index of Berau District - East Kalimantan

|   | Disaster Risk Index       | TOTAL | Risk Level |
|---|---------------------------|-------|------------|
|   | Total                     | 202   | High       |
| 1 | Flood                     | 36    | High       |
| 2 | Earth quake               | 22    | High       |
| 3 | Tsuname                   | 11    | Moderate   |
| 4 | Landslide                 | 24    | High       |
| 5 | Extreme wave and abrasion | 24    | High       |
| 6 | Land and forest fires     | 36    | High       |
| 7 | Extreme weather           | 14    | Moderate   |
| 8 | Dryness                   | 36    | High       |

Processed from: BNPB - Badan Nasional Penanggulangan Bencana /National Body for Disaster Management (2013)

This project will be focused on 2 (two) villages in Maratua island – Berau District – East Kalimantan-that is Teluk Alulu (Alulu Bay) and Bohebukut/Teluk Harapan (Harapan Bay). Maratua is an outer small island which bordering with Malaysia and Philippine-and lived by Bajau and Sulu tribe-which still have blood relationship with the Phillippines. While, most of the comer community who lives in this islands is from Buton and Bugis. Although the community is heteregenous, the social life in this region is running well. The origin people and the foreigners live together-without any social conflicts. The community system is formed by a strong kinship relationship as a social unit in each island. Kinship relationship can be seen through mutual assistance habit on doing the daily activities-where the head of village and public figures have a role as motivator.

The total population in the two target villages-according to BPS of Berau (2016)-is 1,847-consist of 937 male and 910 female. The total household is 351-with the average people is 5.26 per household. As the sub-district capital, Bohebukut or Teluk Harapan is the most densely village-of the four villages in Maratua island. Both of the villages which become the project sites-Teluk Harapan/Bohebukut and Teluk Alulu-dominate 52 % of inhabitant in Maratua island which the total population is 3,555 people. In 2014-2015, the population growth in Maratua island was 4.5 %.

The demography situation in the project target villages

|                         |            |       |        | Number of | Population |                   |
|-------------------------|------------|-------|--------|-----------|------------|-------------------|
| Village                 | Area (km2) |       | Person |           | Household  | Density           |
|                         |            | Male  | Female | TOTAL     | UUUSEUUIU  | (person/km2 land) |
| Teluk Alulu/Alulu Bay   | 53.33      | 365   | 359    | 724       | 141        | 100.42            |
| Bohebukut/Teluk Harapan | 203.37     | 572   | 551    | 1,123     | 210        | 40.91             |
|                         | 256.70     | 937   | 910    | 1,847     | 351        | 70.67             |
| Maratua Island          | 4,119.54   | 1,835 | 1,720  | 3,555     | 691        | 9.25              |

Processed from: Central Statistics Body/Badan Pusat Statistik (BPS) Berau (2016)

Fishery sector becomes the main source of economy activity in Maratua. Most of the populationit is estimated around 80 %-their livelihood is as a fisherman. The kinds of fish that caught and traded are Pelagis and Karang. Beside sold in local market for self consumption and tourism needs, fish is also sold in Tanjung Redeb, Surabaya, cities outside the province-even sometimes it is exported. According to BPS of Berau (2016), the total infrastructure of piscotorial marine fishing in Maratua island is 258 units-which consist of 5 boats, 69 units of fixed-motorboats, and 184 units of motorboats. To catch fish, the equipments which often used are seine net, gillnet, liftnet, lines, purse seine, and traps. Beside as a fisherman, the community livelihood also covers plantation sector-especially coconut, tourism, and trading.

In environmental context, Maratua island always relates to the landscape of Derawan islands which-typically-has coral reef ecosystem, seagrass-meadows, and mangrove forest. As part of coral triangle region, the coral reef wide spreads all over the island and sandbars which exists in landscape of Derawan islands. The types of coral reef are edge coral, barrier coral, and atoll. Atoll in this landscape is located in Kakaban about 19 km², Maratua 690 km², and Muaras 288 km². It can be found around 470 species. Coral reef ecosystem in Derawan islands is the richest biodiversity-after Raja Ampat islands.

While, seagrass-meadows is also found all over the landscape-with the various coverage condition-between 10 % - 80 %. Ecologically, seagrass-meadows has a function as the main source of primary productivity, food source for organisms, stabilize the soft seabed, take cover of organism from predator, place of fish species enlargement, current-*dampers*, and cover from sun shine for the inhabitant. The survey of P20 LIPI and TNC found 8 species of seagrass-meadows-which consist of *Halodule univervis*, *Halodule pinifolia*, *Cyamodocea rotundata*, *Syringodium isoetifolium*, *Enhalus acoroides*, *Thalassia hemprichii*, *Halophila ovata*, and *Halophila ovalis*. There are at least 85 types of 34 fish family live in seagrass-meadows ecosystem in Derawan islands.

Beside ranges on littoral of Berau district-from Sulaiman Bay until Cape Batu, mangrove forest also spreads on Derawan islands-such as Panjang island about 417.38 ha, Semama island 77.15 ha, and Maratua island 369 ha. Ecologically, the ecosystem in mangrove forest has a function for breeding place of fish and shrimp, protecting the beach from abration current and wave, supplying nutrient for the environment. There are at least 26 types of 16 family grow in the ecosystem of mangrove forest in Derawan islands-and dominated by Perepat or White Pidada (Sonneratia alba), Black Mangrove (Rhizophora mucronata), Oil Mangrove (Rhizophora apiculata), and Red Mangrove (Rhizophora stylosa).

Climate of Derawan islands is very influenced by Pasific ocean situation and-in general-it is divided into dry season and rainy season. Rainy season is from October until May-with the average number of rainy days is around 15 – 20 days per month and the most rain falls is in the end or in the beginning of rainy season. While, dry season is in July until September-with the less rain fall is in July. The average temperature is around 19 – 23.2 °C and the maximum temperature is around 32 – 35.6 °C. The average daily temperature does not show a significant fluctuation between day and night-with the difference of maximum and minimum temperature is around 10 – 12 °C.

As a small island, Maratua faces a high vulnerability toward climate change which causes the rise of sea levels, the change of temperature of sea water surface, the change of sea water acidity, the increase of frequency and intensity of extrim climates. Those trends can cause the death of coral reef life, the obstruction of mangrove growth, seagrass meadows becomes stress, the death of phytoplancton that can reduce the fish production, the scarcity of fresh water because of sea water intrusion. Specifically, this project will target several main problems which really felt by Maratua's community-which are the scarcity of fresh water, there is often extrim weather, and the livelihood source is endangered.

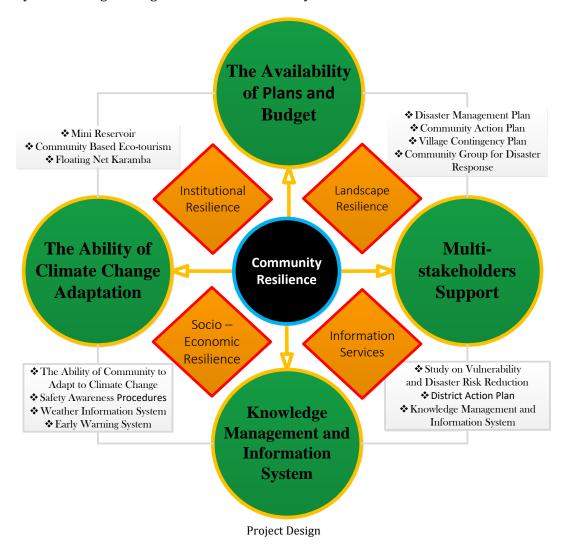
Fresh water is one of scarce resource in Maratua island. Fresh water is only met as shallow groundwater-with the deep is around 1.8 – 2.3 meter. The water quality is quite well and the quantity is quite constant-if the users are not over. Free ground water can be met in Maratua because the material of island shaper is in the result of destroyed coral reef which is porus and permeable. The rain water which falls will infiltrate into the sand and burden the sea water under-so that it is recessived under. The decrease of ground water surface-as the impact of the excessive usage-causes the existence of salt water cone or it is called sea water intrusion into the fresh water aquifer. At the recent day, climate change also supports the case of sea water intrusion which makes fresh water to be more scarce in Maratua. The making of mini lake will be carried out in this project to catch rain water and save it in dry months. The mini lake will be placed in Alulu Bay as the most vulnerable village toward fresh water needs. Moreover, the existence of mini lake also will be connected to ice cube factory in that village. Ice cube is very needed by the majority of the fishermen in this island-moreover, with the increase of extreme weather frequency which makes the fishermen's effective time is lessen to look for fish as their main livelihood source.

The increase of frequency and intensity of extreme weather cases really annoy the life of fishermen community-as the dominant livelihood in Maratua island. Extreme weather causes the fishermen difficult to sail to look for fish-which sometimes also relates to the boat which is not quite strong to face high wave. Climate change also has caused the fishermen experiences and knowledge on the estimation of time and the location of fish-especially, high quality fish-often do not precise. This project will facilitate fishermen community to develop climate/weather information system as the effort to support the improvement of knowledge relates to the catchment time prediction and the right position of the fish. Moreover, this system will also be used by tourism sector to give trusted information for the tourists and the operator of tourism services. Extreme weather also causes high wave which can threatened the safety of the fishermen and the tourists. This project also will develop SOP (Standard Operating Procedures) of safety awareness. Moreover, it is hoped that the application of the procedures which based on the real awareness of the agent-able to realize behaviour as behaviour based safety.

Whereas, the various threats and influences which begin to run as the impact of climate change-obligate the community-especially fishermen-as soon as possible get the other livelihood source which more safe and more sustainable. This project will carry out a facilitation of dveloping community based natural tourism-which will be focused on Harapan Bay village. Although the tourism has been developed, natural tourism has not been felt significantly by the local people. Moreover, there are many people outside the island who own the land which make natural tourism chance as one of the livelihood source is lessen. In addition, the effort to farm fish also will be developed to give a certainty and sustainability of their income from fishery sector. Fish farm will be realized in floating net karamba.

# **Project / Programme Objectives:**

In general, the project proposed by Consortium JAVLEC Indonesia has an goal to develop community resilience to adapt to climate change and its disaster risk. For reach that goal, community have to institutional resilience, socio – economic resilience, landscape resilience, and disaster information services. As for, objectives expected from this project are (1) the increasing of ability of community to adapt to climate change, (2) the availability of plans and budget, (3) the availability of multi-stakeholders support, and (4) the availability of knowledge management and information system.



While, the expected concrete outputs of this project are:

- 1. Document of study of vulnerability and Disaster Risk Reduction,
- 2. Document of Disaster Management Plan,
- 3. Document of Community Action Plan,
- 4. Document of Village Contingency Plan,
- 5. Document of District Action Plan,
- 6. The ability of community to adapt to climate change,
- 7. The availability of community group for disaster response,
- 8. Mini reservoir,
- 9. The establishment of community based natural tourism,
- 10. Floating net karamba,
- 11. The procedures of safety awareness,
- 12. Weather/climate information system,
- 13. Early warning system, and
- 14. The availabiliy of knowledge management and Information system.

The project that will be run by JAVLEC Indonesia Foundation and REDD working group will be held for 24 months-with total cost is USD 946,287 (nine hundreds forty six thousands and two hundreds eighty seven dollar).

**Project / Programme Components and Financing:** 

| Project/Programme<br>Components   | Expected Concrete<br>Outputs  | Expected Outcomes   | Amount<br>(US\$) |
|---|---|---|------------------|
| Developing community resilience plans                                   | <ol> <li>Document of study of<br/>vulnerability and<br/>Disaster Risk<br/>Reduction.</li> <li>Document of Disaster<br/>Management Plan.</li> <li>Document of<br/>Community Action Plan.</li> <li>Document of Village<br/>Contingency Plan.</li> </ol> | The availability of plans and budget.  (Institutional Resilience)                                 | 76,365           |
| 2. Developing Capacity of Community Resilience                          | <ol> <li>The ability of community to adapt to climate change.</li> <li>The availability of community group for disaster response.</li> </ol>  | The increasing of ability of community to adapt to climate change.  (Socio – Economic Resilience) | 22,154           |
| Developing District     Resilience Plan (RAD -     Rencana Aksi Daerah) | Document of District<br>Action Plan.  | The availabity of multi-<br>stakeholders support<br>(Landscape Resilience)                        | 22,700           |
| 4. Developing Community Based Information System                        | <ol> <li>The procedures of safety awareness.</li> <li>Weather/climate information system.</li> <li>Early warning system.</li> <li>The availabiliy of knowledge management and Information system.</li> </ol>  | The availability of knowledge management and information system  (Information Services)           | 67,169           |
| Developing Livelihood     Adaptation                                    | 1.Mini reservoir. 2.The establishment of community based natural tourism. 3.Floating net karamba.   | The increasing of ability of community to adapt to climate change.  (Socio – Economic Resilience) | 490,223          |
| Developing Knowledge     Management and     Information System          | <ul><li>1.Literatures of small island adaptation.</li><li>2.Documentary film.</li><li>3.The adaptation information on regularly progress.</li></ul>   | The availability of knowledge management and information system.  (Information Services)          | 40,258           |

Amended in November 2013

| 4. Monitoring and Evaluation                       | 1.ESMS document.        |  |         |
|--|-------------------------|--|---------|
|  | 2.SGIP document.        |  | 77,792  |
|  | 3.Baseline of natural   |  | ,       |
|  | habitats and biological |  |         |
|  | diversity.              |  |         |
|  | 4.Document of           |  |         |
|  | monitoring and          |  |         |
|  | evaluation.             |  |         |
| 8. Project/Programme Execut                        | 75,492                  |  |         |
| 9. Total Project/Programme C                       | 872,154                 |  |         |
| 10. Project/Programme Cycle Entity (if applicable) | 74,133                  |  |         |
| Amount of Financing Requested                      |                         |  | 946,287 |

# **Projected Calendar:**

| Milestones                                | Expected Dates    |
|---|-------------------|
| Start of Project/Programme Implementation | June 1, 2018      |
| Quarterly Monitoring                      | August 31, 2018   |
| ·   | November 30, 2018 |
|   | Februari 28, 2019 |
|   | August 31, 2019   |
|   | November 30, 2019 |
|   | Februari 28, 2019 |
| Mid-term Review (if planned)              | May 31, 2019      |
| Project/Programme Closing                 | March 31, 2020    |
| Terminal Evaluation                       | May 31, 2020      |

# PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project / programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

The goal which wants to be achieved in this project is developing a scheme of community adaptation resilience of climate change which focused on small islands. The project aims to develop a scheme of community adaptation resilience of climate change, focused on two villages. The project objectives are:

- (1) Increasing the ability of the maratua island community to adapt to climate change through community action plans and villages contingency plan,
- (2) Improve the availability of plans and budget for climate resilience on district scale,
- (3) Improve multi-stakeholder support for climate resilience on community food security, disaster risks and lack of water sources, and
- (4) Improve knowledge management and information systems on climate resilience. Those four objectives are addressed to realize community resilience on facing climate change and disaster risk rise.

To realize those objectives, the community which will be facilitated through this project must have institutional resilience, social and economy resilience, landscape resilience, and the availability of disaster information service.

Relates to the strategy that implemented to support Maratua's island communities on doing climate change adaptation, there are several ways that taken, they are:

- (1) The strategy to develop the community ability to make adaptation toward climate change through action plan of community based climate change adaptation and village contingency toward climate change. In order to achieve the strategy, there will be some activities which are from resilience study, the study of the level of vulnerability and natural disaster risk, the making of community action plan, the village contingency and capacity building of the community relates to climate change adaptation.
- (2) The strategy to encourage action plan and budgeting for the activity of climate change adaptation in district level by developing action plan of climate change adaptation in local level and disaster response action for the communities.
- (3) The strategy to give support community resilience on facing climate change in the form of pond construction to overcome fresh water shortage in the communities, supporting eco-friendly ecotourism management, supporting

- economic and the community food source with effective management of fisheries by using floating *karamba*, and handling disaster risk by developing EWS and the development of community based weather information.
- (4) The strategy to develop knowledge and information relates to the development of climate change adaptation scheme by the communities in Maratua island as literature material, learning sources, and the dissemination of the community adaptation process toward climate change in Maratua's small island.

The form of the target of the project implementation is presented in the logical frame work below:

|   | LEVEL   |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|
| Goal  | Objectives  | Expected Concrete Outputs  | Target   | Means of<br>Verification   |  |  |  |  |
| Developing<br>Community<br>Resilience to<br>Adapt to<br>Climate<br>Change in<br>Maratua | Presence of community capacity on climate change adapatation;         | <ol> <li>Study of vulnerable and disaster risk resilience conducted,</li> <li>Presence of Disaster management document,</li> <li>Presence of community action plans,</li> <li>Presence of villages contingency plan,</li> <li>Presence of district action plan conducted,</li> </ol> | 2 focus<br>villages of<br>maratua<br>small island<br>Maratua<br>region | <ol> <li>represent document study</li> <li>represent planning document</li> <li>represent contruction</li> <li>Project report</li> </ol> |  |  |  |  |
|   | 2. Presence of plans and  | Community capacity on climate change adaptation increase,  |  | 5. Relevant documentation  |  |  |  |  |
|   | budgets on adaptation;  | 7. Community disaster response conducted,  |  | such as photo,<br>budget report,<br>activity report,   |  |  |  |  |
|   | Resence of institution     Resence of community,                      |  |  | presention   |  |  |  |  |
|   | support.  | Conduct community based ecotourism,  |  |  |  |  |  |  |
|   |   | Floating net keramba for community develop,  |  |  |  |  |  |  |
|   |   | 11. Community safety procedure develop,  |  |  |  |  |  |  |
|   |   | 12. Climate/Weather information system develop,  |  |  |  |  |  |  |
|   | 4. Knowledges dan 13. Early warning system for community develop, and |  |  |  |  |  |  |  |
|   | information<br>sytem<br>availibilty.                                  | Community Knowledges and information sytem development.  |  |  |  |  |  |  |

The project will focus in small island of Maratua, with the focus of assistance on the two villages. While, the number of beneficiaries of this project is around 350 households, 200 students, and also Government of Berau District. While, the scope of project implementation is 997 km². Maratua Island is a part of Berau District. According to Information System of Vulnerability Index Data (SIDIK – *Sistem Informasi Data Indeks Kerentanan*)-which was issued by the Ministry of Forestry and Environment in 2015, East Kalimantan is a province which is categorized as quite vulnerable. This province has 44 villages in very vulnerable level category or if in number is about 5.0 %. Based on Disaster Risk Index/DRI (*Indeks Resiko Bencana* – IRBI) which was issued by Indonesian National Authority for Disaster Management (Badan Nasional Penanggulangan bencana-BNPB) in 2013, Berau-as the project target site-is a district/city in East Kalimantan which has the highest disaster risk index-with the score is 220 and includes Maratua island.

|   | Disaster Risk Index       | TOTAL | Risk Level |
|---|---------------------------|-------|------------|
|   | Total Value               | 202   | HIGH       |
| 1 | Flood                     | 36    | High       |
| 2 | Earth quake               | 22    | High       |
| 3 | Tsunami                   | 11    | Moderate   |
| 4 | Landslide                 | 24    | High       |
| 5 | Extreme wave and abrasion | 24    | High       |
| 6 | Land and forest fires     | 36    | High       |
| 7 | Extreme weather           | 14    | Moderate   |
| 8 | Dryness                   | 36    | High       |

Outputs of this project will give direct contribution toward the readiness of the community in small island in the form of the readiness of physical-mental, strategy, procedure of adaptation and disaster, support toward early warning system, adaptation of livelihood and education for the community. Those combinations will form a community alert to face difficult situation caused by climate change. So, the result of the program will able to show activities demonstration in national scale to facilitate small island communities that have the most vulnerable level because of climate change.

**B.** Describe how the project / programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

The scope of project implementation on the small islands has the biggest ecosystem vulnerable level and community. So, it is needed studies to know the risk level and the usage to the economy, social, natural environment which packaged on ESMS (Environmental and Social Management System) study. Moreover, there will be carried out an study or evaluation on social integration level and especially gender on the project site and on landscape scale in general. The two studies will base on the project running in order to be appropriate with the goal. Moreover, the project also has designed activities which adjusted with the community cultures in the project location in the form of interventions of eco-friendly livelihood adaptation, covers: the development of the community fresh water saving in the form of mini lake, the development of marine fish farming with karamba, and also eco-tourism handling. Those activities will be focused on the increase of economy and community food resilience, all it once to support natural environment rehabilitation.

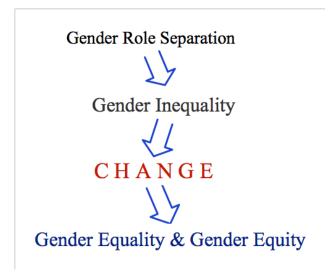
In the project, it has also been included activities to prevent negative impact because of the project. The activities are:

- Program socialization has an objective to make an understanding of the project implementation, and the support from multistakeholder included community,
- ❖ Assistance has an objective to improve the community capacity intensively,
- Multistakeholders coordination has an objective to inform the running of the project and also get suggestions and support,
- Studies with several forms have objectives to get the latest information and reference as the basis of improvement of activity implementation plan,
- Project implementer structure has objectives to make an efficiency and effectivity of project implementation which carried by a competent individual, and
- ❖ Monitoring evaluation and also reporting has an ojective to control the project implementation in order to keep appropriate with the goal.

While, as the action to be safe along the project implementation, the staff and visitors will be supported by self safety equipment at the sea because the project site has a high risk.

The target of direct beneficiaries is about 350 households, 200 students are vulnerable community because of climate change. Moreover, that target is poor – almost poor categorized with the average income is about IDR 2,250,000 per month (*Poverty Identification in Derawan and Maratua island sub-district*, 2015). That community is a marginalized community because of its geographical location as the outermost island of Indonesia.

The project will also map the gender roles which will be held in the assessment of SGIP (Social and Gender Integration Plan) with the logical framework as follows:



The result of gender analysis will become the reference on improving gender equity in the activity process for climate change adaptation. It will be part of the process of the community adaptation all together on doing climate change adaptation. It also includes to rise of the role of women, youth, and children as part of disaster resilient community.

Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy. In that policy, it is used work performance tabulation of environment and social as follows:

| Checklist of Environmental and Social<br>Principles | No Further<br>Assessment<br>Required for<br>Compliance | Potential impacts and Risks –<br>Further Assessment and<br>Management Required for<br>Compliance |
|---|--|--|
| Compliance with the Law                             |  |  |
| Access and Equity                                   |  |  |
| Marginalized and Vulnerable Groups                  |  |  |
| Human Rights  |  |  |
| Gender Equity and Women's<br>Empowerment            |  |  |
| Core Labor Rights                                   |  |  |
| Indigenous Peoples                                  |  |  |
| Involuntary Resettlement                            |  |  |
| Protection of Natural Habitats                      |  |  |
| Conservation of Biological Diversity                |  |  |
| Climate Change                                      |  |  |
| Pollution Prevention and Resource<br>Efficiency     |  |  |
| Public Health                                       |  |  |
| Physical and Cultural Heritage                      |  |  |

**C.** Describe or provide an analysis of the cost-effectiveness of the proposed project / programme.

As the effectivity of project cost, it used measurement tool by comparing the proposal budget with the output and target. The result of short analysis about comparing the cost effectivity on the proposed project is as follows:

| Compare Level        | Amount | Unit    | Project Cost   | Unit               |
|----------------------|--------|---------|----------------|--------------------|
| Proejct Input        | 2      | year    | 10,000,000,000 | IDR                |
| Effected areal range | 99,700 | hectare | 100,300.90     | IDR/Ha             |
| Beneficiaries        | 3,555  | norcon  | 2,812,939.52   | IDR/person/2 years |
| Deficiciones         | 3,000  | person  | 117,205        | IDR/person/month   |

By looking at the comparison above, the value of project development to each hectare is IDR 100,300.90 for a long period. While, the value of the project beneficiaries is IDR 2,812,939 for two years or the same with IDR 117,205 per month per person.

As a small island, Maratua faces very high susceptibility toward climate change that causes the increase of sea level, the change of sea water temperature, the change of sea water acidity, the increase of frequency and intensity of extreme climate. Those tendencies can cause the dead of coral reef, the mangrove growth is hampered, seagrass beds become stress, the dead of phytoplankton that reduces the fish production, freshwater scarcity because of sea water intrution. In general, this project targets some main problems that in real have been felt by Maratua's community-which are fresh water scarcity, extreme weather that often happens, and livelihood source is endangered.

Therefore, this project is designed to target those various main problems through realizing community resilience on facing climate change and the increase of disaster risk. Activities that will be run in this project are focused to develop community resilience in the form of community capacity building on climate change adaptation, the availability of plans and budget, institutional support, and the availability of information system and knowledge management. In detail, the main activity, cost, and main problems that faced by community on climate change-are showed in the following table.

| No. | Main activities   | Cost<br>(USD) | Main Problem of Intervented<br>Climate Change  |  |
|-----|---|---------------|--|--|
| 1   | Developing Community Resilience<br>Plans                        | 76,365        | <ul><li>Fresh water scarcity</li><li>Extreme Weather happens</li><li>Livelihood source is endangered</li></ul> |  |
| 2   | Developing Capacity of Community<br>Resilience                  | 22,154        | <ul><li>Fresh water scarcity</li><li>Extreme weather happens</li><li>Livelihood source is endangered</li></ul> |  |
| 3   | Developing District Resilience Plan (RAD - Rencana Aksi Daerah) | 22,700        | <ul><li>Fresh water scarcity</li><li>Extreme weather happens</li><li>Livelihood source is endangered</li></ul> |  |
| 4   | Developing Community Based<br>Information System                | 67,169        | <ul><li>Fresh Water scarcity</li><li>Extreme water happens</li><li>Livelihood source is endangered</li></ul>   |  |
| 5   | Developing Water reservoir                                      | 364,323       | Fresh water scarcity   |  |
| 6   | Developing Net Floating Karamba                                 | 94,192        | Livelihood source scarcity   |  |
| 7   | Developing Community Based<br>Ecotourism                        | 31,708        | Livelihood source is endangered  |  |

Without the availability of water resevoir, the community of Kampung Teluk Alulu purchases fresh water at the price of IDR 200,000 per family per week. With the assumption that the purchasing of fresh water only takes place in dry season so that each family in the village has to pay IDR 5,214,286.71 per year. According to BPS of Berau in 2016, total population of Kampung Teluk Alulu is 141 households. Therefore, the village has to pay IDR 735,214,285.71 per year. The project intervention in the form of water reservoir in the value of USD 364,323 or IDR 4.7 billion will return in 6.4 years (internal rate of return).

While, the project intervention in the form of net floating karamba in the value of USD 94,192 or IDR 1.2 billion will return in the period of 3.1 years (internal rate of return). That condition can be achieved only with assumption that the result revenue is about a half of the common value or about IDR 50 million per pack and twice of harvest per year. Floating net karamba for Baronang fish should be able to be harvested 4 times a month.

# Components of each budget item are detailed below:

| No. | Main Activities/Detail of Activity                              | Cost (USD) |
|-----|---|------------|
| 1   | Developing Community Resilience Plans                           | 76,365     |
|     | Program socialization   | 2,562      |
|     | Community facilitation  | 34,462     |
|     | Study on disaster risk resilience                               | 6,135      |
|     | Developing disaster management plan                             | 4,962      |
|     | Developing community action plan                                | 16,038     |
|     | Developing village contingency plan                             | 3,962      |
|     | Public consultation   | 1,231      |
|     | Integrating community plan and village plan                     | 7,015      |
| 2   | Developing Capacity of Community Resilience                     | 22,154     |
|     | Need assessment   | 3,754      |
|     | Developing training modules                                     | 2,600      |
|     | Training on climate change adaptation                           | 7,785      |
|     | Training on disaster risk resilience                            | 8,015      |
| 3   | Developing District Resilience Plan (RAD - Rencana Aksi Daerah) | 22,700     |
|     | Developing document of district resilience plan                 | 11,346     |
|     | Intensive communication/audiency                                | 4,892      |
|     | Multi stakeholders workshop                                     | 6,462      |
| 4   | Developing Community Based Information System                   | 67,169     |
|     | Developing website  | 5,731      |
|     | Training on community based information center                  | 21,238     |
|     | Need assessment of early warning system                         | 4,492      |
|     | Installation of community based EWS                             | 24,092     |
|     | Training on EWS for community                                   | 2,438      |
|     | Developing SOP of EWS   | 1,385      |
|     | Developing information modules                                  | 1,538      |
|     | Developing information leaflets                                 | 1,077      |
|     | EWS demo for schools and community                              | 5,177      |
| 5   | Developing Water reservoir                                      | 364,323    |
|     | Facilitating water management institution                       | 22,708     |
|     | Feasibility study and DED                                       | 5,423      |
|     | Construct water reservoir                                       | 328,308    |
|     | Construction permits  | 4,346      |
|     | Training on management of mini reservoir                        | 3,538      |
| 6   | Developing Net Floating Karamba                                 | 94,192     |
|     | Feasibility study   | 3,538      |
|     | Installation of net floating karamba                            | 87,077     |
|     | Training on management of net floating karamba                  | 4,462      |
| 7   | Developing Community Based Ecotourism                           | 31,708     |
| -   | Training on community based ecotourism                          | 3,554      |
|     | Facilitating community based ecotourism                         | 28,154     |

D. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or subnational development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The project implemented is in line with National Action Plan – Climate Change Adaptation (RAN – API) which was issued by BAPPENAS in 2014. Action plan has a guidance for the implementer of climate change adaptation activity. In that action plan, there is national strategy of climate change adaptation which becomes a guidance for climate change adaptation activities. So, in this project, the target of action plan with the existence of cluster category in RAN – API which is appropriate with project activity that will be implemented is categorized as follows:

| Activity (project)  | RAN – API   |
|---|---|
| Build community based eco-tourism   | Action plan of food resilience sub field on   |
| 2. Make floating net karamba  | cluster (5) innovative technology development and communication (climate and technology),   |
| Install climate/weather system information  | cluster (6) the development of information and communication system, and cluster (7) the supporter program.                         |
| The result of vulnerability and disaster risk reduction study   | Action plan of housing sub field on cluster (3) community empowerment effort.   |
| 2. The document of Disaster Management Plan   |   |
| <ul><li>3. The document of Community Action Plan</li><li>4. The document of Village Plan</li></ul>        |   |
| Early warning system is built     Self safety procedure is arranged                                       | Action plan of infrastructure sub field on cluster (6) the improvement of the support infrastructure for climate change adaptation. |
| 1. Mini lake is built   | Action plan of ecosystem resilience field on cluster (2) management and usage of sustainable productive area.                       |
| Information system and knowledge management is built  | Action plan of coastal and small islands in all clusters.   |
| 2. Community capacity on climate change adaptation is built   |   |
| <ul><li>3. Disaster Response Group is formed</li><li>4. The document of Local Action Plan (RAD)</li></ul> |   |

**E.** Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

Activities in this project refer to some policies or national standard-such as Regulation of the President Number 61 of 2011 concerning National Action Plan of Green House Emission Reduction, Regulation of the head Indonesian National Board for Disaster Management Number 4 in 2008 about the guidelines of Disaster Management Plan Arrangement, and Regulation of the Head of Indonesian National board for Disaster Management Number 1 in 2012 about General Guidelines of Disaster Resilient Village/Kampung. The linkage of those policies can be seen on the table below.

|   | Main Activities   | National Standard  |
|---|---|--|
| 1 | Developing<br>Community<br>Resilience Plans   | <ul> <li>Regulation of the Head of Indonesian National Board for Disaster Management<br/>No.4 of 2008 concerning Guidelines of Disaster Management Plan Arrangement</li> <li>Regulation of the Head of Indonesian National Board for Disaster Management<br/>No.1 of 2012 concerning General Guidelines of Disaster Resilient<br/>village/Kampung</li> </ul> |
| 2 | Developing Capacity<br>of Community<br>Resilience                                       | <ul> <li>Regulation of the Head of Indonesian National Board for Disaster Management<br/>No.4 of 2008 concerning Guidelines of Disaster Management Plan Arrangement</li> <li>Regulation of the Head of Indonesian National board for Disaster Management<br/>No.1 of 2012 concerning General Guidelines of Disaster Resilient<br/>village/Kampung</li> </ul> |
| 3 | Developing District<br>Resilience Plan<br>(RAD - <i>Rencana Aksi</i><br><i>Daerah</i> ) | Regulation of the President No.61 of 2011 concerning National Action Plan of Green House Emission Reduction – which said that RAD is a work document for the implementation of many activities that directly or indirectly can reduce green house emission appropriate with local development target   |
| 4 | Developing<br>Community Based<br>Information System                                     | RAN API<br>Ecosystem Resilience Field<br>Cluster 6 Information and Communication Development   |
| 5 | Developing Water reservoir  | RAN API<br>Economy Resilience<br>Food Resilience Sub-Field<br>Cluster 3 Development and Maintenance of Agricultural Facilities and Infrastucture<br>which is climate proof – No. 12  |
|   |   | Increase the level of service and facilities performance of water source for supporting water supply and food resilience   |
| 6 | Developing Net<br>Floating Karamba  | RAN API<br>Economy Resilience Field<br>Food Resilience Sub-Field<br>Cluster 1 the Adaptation of Food Production System– No.14 red tide impact<br>management in fish farm area in net floating karamba  |
| 7 | Developing<br>Community Based<br>Ecotourism   | RAN API<br>Ecosystem Resilience Field<br>Cluster 2 management and use of sustainable productive area – No.2 the<br>development of eco-tourism and environmental service  |

This project will be started with ESMS study (Environmental and Social Management System). ESMS study will result an environmental and social management plan which will be applied in the project implementation. Nevertheless, based on the slight screening-environment and social risk management which predicted will happen-in line with the environmental and social policy of adaptation fund-is as seen on the table below:

# Amended in November 2013

| Principle  | Risk Potency   | Management Plan   |  |
|--|--|---|--|
| Principle 1. Compliance with the Law                 | Construction<br>Development                                  | The construction of mini lake and floating net karamba in this project will follow the rules which applied-included to provide the appropriate permission-such as SPPL or AMDAL. JAVLEC Indonesia has had experiences on the arrangement of construction development on project site –in this case is solar energy power plants, ice cube factory, and Mangrove Informantion Center.  |  |
| Principle 2. Access and Equity                       | Injustice access   | The project will carry out a stakeholder mapping to find out the potential beneficiaries, rivals, disputants, marginalized, or vulnerable people. Then, risk analysis will identify the possibility of the carelessness of rights and basic service-and the occur of injustice.   |  |
| Principle 3. Marginalized and Vulnerable Groups      | The univolvement of vulnerable and marginalized group        | In general, this project will focus on the vulnerable and marginalized group-<br>especially poor family, women group, and the youth. In initial stage, the project<br>will also hold gender and social study-which will result SGIP document (Social<br>and Gender Integration Plan). Various plans which written in the document-<br>then-become part of overall project implementation.   |  |
| Principle 4.<br>Human Rights                         | Human Rights<br>Violations                                   | This project will avoid the possibility of human rights violations. ESMS study and SGIP study will include human rights policy-such as Act No. 39/99 about human rights and the various convention/pacta which are relevant and have been ratified by Indonesian government—such as a Convention on the Elimination of All Forms of Discrimination against Women, International Convention on the Elimination of All Forms of Racial Discrimination, Convention on the Rights of Persons with disabilities,etc.   |  |
| Principle 5. Gender Equality and Women's Empowerment | Gender inequality  | Women group is one of the main group target in this project. In initial stage, this project will also carry out gender and social study-which will result an SGIP document (Social and Gender Integration Plan). Various plans are written in the document-then-become the part of all project implementation.  |  |
| Principle 6.<br>Core Labor<br>Rights                 | Labor basic rights is not assured                            | This project will always pay attention on the labor basic rights—either who involves as the staff or in construction development work. The labor basic rights covers the rights of proper pay, the rights of social assurance, the rights of benefolent, the rights of rest time and leave time, the rights of holiday and overtime fee, the rights of freedom of association, the rights of reproductions, the rights of worship, the rights to direct action, the rights of safety and healthy work, the rights to get equal treatment, and the rights of severance pay if fired. |  |
| Principle 7.<br>Indigenous<br>Peoples                | The carelessness<br>of local people<br>and/or<br>indigeneous | This project will focus to empower the local community, but not for indigeneous people. The strategy of local involvement will be based on ESMP document and SGIP document. JAVLEC Indonesia Foundation has had experiences on involving local community on the project site construction development-so that the project implementation can run smoothly, received by the local community, and can strengthen social capital.  |  |
| Principle 8.<br>Involuntary<br>Resettlement          | The remove of indigeeous people                              | This project will have a small chance to remove indigeneous people.   |  |
| Principle 9. Protection of Natural Habitats          | The unprotected natural habitat                              | This project will have an impact for the protection of mangrove ecosystem, coral reef, and segrass meadows. The monitoring of habitat will be carried out periodically as part of monitoring and evaluation activity.   |  |

#### Amended in November 2013

| Principle 10.<br>Conservation of<br>Biological<br>Diversity | The unprotected flora and fauna types diversity   | This project will have an impact for the protection of flora and fauna diversity on mangrove ecosystem, coral reef, and seagrass meadows. The monitoring of flora and fauna diversity will be carried out periodically as part of monitoring and evaluation activity.  |
|---|---|--|
| Principle 11.<br>Climate Change                             | The occur of carbon emmission                     | Adaptation scheme of climate change which will be carried out through this project will contribute toward the decrease of carbon emmission. This study will be carried out to count the amount of the decrease of carbon emmission that can be donated through results or output which can be achieved by the project implementation.  |
| Principle 12. Pollution Prevention and Resource Efficiency  | The occur of pollution and resources inefficiency | The various adaptation schemes which will be held through this project-are expected can give for the increase of natural resources efficiency-such as water on the construction of mini lake, fish on the procurement of floating net karamba, and environment on the tourism development. Pollution prevention – either waste, chemical subtances, sound, etc-will be avoided as minimum as possible in this project. Pollution prevention strategy will be shown in ESMP document. |
| Principle 13.<br>Public Health                              | Public health is endangered                       | This project has a small chance to give a treath for public health or local people.  |
| Principle 14. Physical and Cultural Heritage                | Cultural<br>inheritance                           | It is not found cultural inheritance on the target site-which can be threatened by this project implementation.  |
| Principle 15.<br>Lands and<br>Soil<br>Conservation          | Soil conservation is threatened                   | In this project, mini lake construction has a relation to the possibility of the threatened of soil conservation. So, the costruction of mini lake will be followed by Feasibility Study and Detail Engineering Design-which then be analyzed using ESMS (Environmental and Social Management System) study. ESMS study will result environment and social management plan which will be applied into the project implementation.  |

# **F.** Describe if there is duplication of project / programme with other funding sources, if any.

This project results are some documents of plan in village/kampung level – such as Disaster Management Plan (*Rencana Penanggulangan Bencana*-RPB), Community Action Plan (*Rencana Aksi Komunitas* – RAK), and Village Contingency Plan (*Rencana Kontinjensi Desa* – RKD)-by refering to the Regulation of the Head of Indonesian National Board for Disaster Management No.1 in 2012 about General Guidelines of Disaster Resilient Village. The documents will be integrated with Village Medium-Term Development Plan (*Rencana Pembangunan Jangka Menengah Kampung* – RPJMK). Therefore, automatically-village will also allocate budget from the village fund (*Dana Desa*) which is now adequate. District Action Plan (*Rencana Aksi Daerah* – RAD) also will be integrated with District Medium-Term Development Plan (*Rencana Pembangunan Jangka Menengah Daerah* – RPJMD).

On village/kampung and Local/District level, Yayasan JAVLEC Indonesia-together with consortium member have had quite high social capital of activity and program implementation during this time. Various activities which raised in this project are also from communities, village government, local government, and the other related stakeholders.

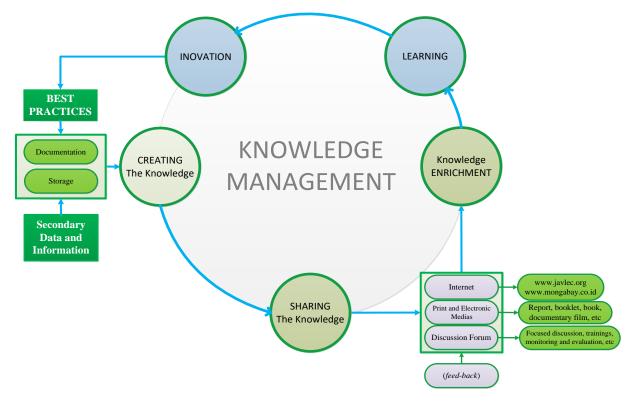
**G.** If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

The project also will do information management and learning. To carry out it, it is run using some strategies below:

#### a. Process documentation

- Process documentation a process which carried out through monthly report, three months report, activity implementation report. This process will be carried out by all team member.
- The making of booklet. This is an activity to embrance activities have been done and as a materials of learning for people.
- The making of climate change adaptation book on small island. This is a science work which the materials are from the project implementation that supported by analysis about the process which run.
- The making of documentary movie relates to activities as actual document of project implementation.
- b. Learning dissemination
  The spread of information and data about activity of climate change adaptation via
  website: www.javlec.org and www.mongabay.co.id.

Knowledge management in this project will be implemented as seen below.



Therefore, publication products-either in the form of book or film documentation-are the result of a whole knowledge management-which also accommodate any feedback from various parties.

**H.** Describe the consultative process, including the list of stakeholders consulted,

undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

From the ongoing project which is funded by MCA Indonesia, JAVLEC has had a good relationship with local government such as the regent, the vice of regent, and also the related agencies such as BAPPEDA (Development Planning Agency at sub-national level), Marine and Fishery Agency (*Dinas Kelautan dan Perikanan*), Village Community Empowerment Agency (*Dinas Pemberdayaan Masyarakat Desa*), Sub-district government of Maratua, Local government, and also village community in Maratua. Therefore, there is also extracting data through FGD with community group and tourism manager for the important parameter in the project such as fresh water (10,000 liters/week/household), community income level, the variety and the change of livelihood, role division in the family, frequency and the type of disaster which occur, and also climate change in the last 5 years.

The result of discussion with the regent and the vice regent of Berau also supports the existence of climate change adaptation for Maratua island especially on fresh water availability, marine based tourism, ecotourism and the comunity readiness for disaster considering that Maratua is a small island which is susceptible toward climate change especially the rise of sea level, storm/hurricane, and the other extreme weather. Moreover, there is a conformity with local development plan of Berau District on RPJMD (Medium Term Development Plan in District Level) in 2016 – 2021 of Chapter VI on Strategy and Policy Direction especially on the cluster of strategy as follows:

# 1. Women Empowerment and Family Planning

# Strategy 1

Gender equality enhancement, quality life improvement and protection from violence, exploitation and discrimination toward women and children.

#### Policy direction:

- (1) The increase of active role of women in the development.
- (3) The increase of women participation in legislative.
- (5) The improvement of quality life and protection of women as part of human resources included female worker protection.
- (6) The improvement of quality and welfare, and also children protection.
- (7) Institutional strengthening of gender and children mainstreaming

## 2. Marine and Fishery

## Strategy 2

The increase of marine and fishery resources usage and land potency optimally. Policy direction:

- (1) The increase of coastal areas and small islands development and the arrangement of fisherman housings in order to be marine tourism object.
- (2) The increase of production through optimalization of land utilization.

#### 3. Fresh Water

# Strategy 1

The improvement of infrastucture and facilities of fresh water.

## **Policy direction:**

- (1) The improvement of the coverage of fresh water service.
- (2) The construction of some fresh water facilities and water resources.

## Strategy 2

The provision and management of raw water gradually and water resources conservation.

## **Policy direction:**

- (1) The development and management of pond as raw water.
- (2) The increase of community participation and coastal and river protection in order to save water.
- (3) The construction of water resources infrastructure.
- (4) The provision and management of raw water.
- (5) The development, management, and conservation of river, lake, and the other water resources.

#### 4. Tourism

## Strategy 1

The increase and development of tourism promotion.

#### Policy direction:

- (1) The increase of construction of facilities and infrastructure of tourism and art.
- (2) The increase of tourism objects.
- (3) The improvement of human resources in tourism field.

#### 5. General government

# Strategy 9

The increase of quality of Disaster Management and Community Protection.

## **Policy direction:**

- (1) The increase of handling and managing of disaster through early prevention, disaster risk reduction included the alert, early warning and mitigation.
- (2) The increase of quality and quantity of facilities and infrastructure in the context of disaster management.
- (3) The increase of rehabilitation and reconstruction after the disaster.

As part of project implementation plan, it has been arranged an effort to make a coordination with multistakeholder, especially local government as the development policy holder. The coordination is run as the effort to deliver activities which run by the consortium in order to synergize with local spatial, local development plan, and furthermore that one of the assurance of the project sustainability can be continued by the government because of some limitations. The limitation because of the project duration, that is 2 years. After the duration

has been over, the project sustainability will be continued by the local government which is written in local development agenda. So, on implementing the project, it is run activities which addressed to accomodate the project sustainability by the government from project socialization, stakeholder coordination, and also the government on the project implementation on the role as local policy holder. To accomodate these needs, it will be appointed special personnel in the project implementer structure who will manage stakeholder relation, communication and program integration.

Moreover, the result which will be achieved in the project is the arangement of local action plan for climate change adaptation. The realization of local action plan is by putting activities of climate change adaptation as part of local development strategy that implies on the availability of local fund for climate change adaptation. Here are some process which arranged as the consultative process with multistakeholder:

- Hold workshops of climate change adapatation,
- Hold FGDs and workshops in village level,
- Meeting and training which always involve multistakeholders,
- Presentation to multistakeholders, and
- Consultation public.

While, which is meant by multistakeholders that will be part of the project are: community, village government, school, sub-district government, lodging house and hotels entrepreneur, District Government of Berau (Head of District, SETDA, BAPPEDA, Office of Environment, Office of District Spatial Planning, Office of Public Works), Province Government of Kalimantan Timur (BP DAS, Fishery and Marine office, Forestry Office).

In the project implementation, the beneficiaries are not only men, but also women, the involvement of the youth and children. For the implementation, it will be built monitoring activity periodically of SGIP implementation which is arranged in the beginning of the project implementation. It is being important part for the improvement of gender role (women, the youth, children) as part of climate change adaptation activity.

Activity type which supports gender equality by involving women and the youth which is designed in the project covers:

- SGIP Assesment.
- Monitoring and evaluation of ESMS and SGIP process in 3 times.
- Developing disaster management plans.
- Developing community action plans.
- Developing villages contingency plans.

Whereas activity that involving women, the youth, and children is:

- EWS Demo for school and community.

In order to realize the needs relate to gender, so it was conducted analysis and measurement of gender policy parameter through interview and the result are below:

| Checklist of Social and Gender Principles | No Further Assessment<br>Required for Compliance | Existing Condition   |
|---|--|--|
| Gender                                    | SGIP Assesment                                   | Most of the community is classified in poor category-almost poor. Women and men both work as fishermen and work in the farm. Household role is dominated or burdened more to women.  |
| Gender balance                            | SGIP Assesment                                   | Not much involve the youth and women.  |
| Gender equality                           | SGIP Assesment                                   | The decision is dominant in men.   |
| Gender equity                             | SGIP Assesment                                   | The youth does not get portion on the decision making.   |
| Gender mainstreaming                      | SGIP Assesment                                   | -  |
| Gender responsive                         | SGIP Assesment                                   | There is not yet any women leader in the community formal organization.  |
| Gender sensitive                          | SGIP Assesment                                   | Children and the youth do not become important part on the community decision.   |
| Women empowerment                         | SGIP Assesment                                   | Women institutional is still limited, in the form of PKK (family welfare movement organization) and Dasa Wisma (small association of households). There is special work that handled by women, that is the production of coconut oil. For marine fishery, women run the role on cleaning the fish catch. |

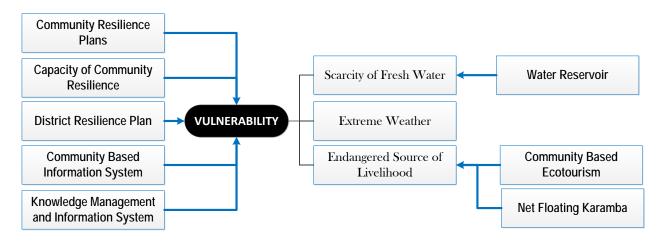
# Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The main contents of the proposed project are: the community resilience toward natural disaster, the ability/strategy of community to make a climate change adaptation, disaster early warning system and the ability to do livelihood adaptation. Those things will be adjusted with the need of the project site which has dense population that is 70.68 persons/km².

Maratua island directly borders with Philippine sea which has a strong sea current, and it increases the vulnerability level of the project site. That condition also becomes a limitation for some community which can be categorized as vulnerable to be poor on their various livelihoods. So, the proposed project is developed to be the basis of community development on the effort to adapt with climate change and food resilience, especially if there is a disaster.

As it is mentioned before, this project will target on some main problems which are more real felt by Maratua's community-they are fresh water scarcity, extreme weather that often occurs, and the livelihood resources are endangered. This project will result a series of output which contributes directly or indirectly on the climate change adaptation effort. Those

outputs are indrectly will give contribution for adaptation ability toward the overall main problems—cover fresh water scarcity, extreme weather that often occurs, and livelihood resources that are endangered—cover community resilience plans, capacity of community resilience, District Resilience Plan, community based information system, dan knowledge management and information system. The making of water reservoir will directly contribute for the problem of fresh water scarcity, while net floating karamba and community based ecotourism directly give a way out of the vulnerability of the threatened of the community livelihood resources.



**J.** Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project / programme.

One of the strategy which is developed and planned in the project as part of the sustainability will be promoted by preparing the community in managing assets developed by the project. In this case, the role division of each stakeholder as follows:

| Segment                 | Role  |  |
|-------------------------|---|--|
| Government              | ❖ Local policy holder   |  |
|                         | ❖ Holds service function                                      |  |
|                         | Holds empowerment function                                    |  |
|                         | ❖ Holds monitoring function                                   |  |
| Private Sector          | ❖ Investment  |  |
|                         | ❖ As part of climate change adaptation initiative             |  |
| Community/beneficiaries | Project beneficiaries   |  |
|                         | The implementer of climate change adaptation initiative       |  |
|                         | <ul> <li>Manager and direct asset user</li> </ul>             |  |
| The implementer AF      | Function of climate change adaptation initiative facilitation |  |

The community readyness is the main key of the sustainability after the program ends. To reinforce it, it can not be aparted from the government roles. So, the proposed program has a relation with local government. On the other side, the program also involves private sector roles to be part of the program.

In general, the project sustainability—whether environmental, economic, and socio-culture—will be embodied in the form of a community capacity building and various plans which produced through this project. Those plans will be integral with regional development plan—either villages/*kampung* in the from of RPJMK or local/district in the from of RPJMD. Separately, this project is also designed to be able to give assurance for the sustainability of environment, economic, and socio-culture—as they can be seen below.

| Aspect of Sustainability | Explanation   |
|--------------------------|---|
| Environmental            | This project will conduct ESMS (Environment and Social Management System) study which gives an assurance on environmental sustainability. Periodically, it will also be carried out survey and monitoring toward natural habitats and biological diversity as the evaluation basis toward the not disruption of the quality of environment. Physical construction—either net floating karamba or water reservoir—is also will be begun with Feasibility Study (FS) and Detail Engineering Design (DED) by considering ESMS document.  |
| Economic                 | The development of community based ecotourism and net floating karamba will contribute on the provision of alternative economy income—as the result of the threathened of community livelihood source. Climate change has caused the raise of sea level, the change of sea water acidity, and also the increase of frequency and intensity of extreme climate occurance. This condition causes the fishermen go further to catch fish—moreover they become less often look for fish. When they can get pretty much fish, they also face inability to store it in a long period as the result of ice blocked scarcity. The construction of water reservoir will be able to provide fresh water for the need of ice blocked making—so that indirectly will also contribute for the economic sustainability. |
| Socio-Cultural           | This project will conduct ESMS (Environment and Social Management System) and SGIP (Social and Gender Integration Plan) study that will give assurance for the sustainability of socio-culture. The involvement of all community elements—included marginal groups—will generate a comprehensive and legitimate approach.   |

**K.** Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

| Checklist of Environmental and Social Principles | No Further<br>Assessment<br>Required for<br>Compliance | Potential Impacts and Risks – Further<br>Assessment and Management Required for<br>Compliance |
|--|--|---|
| Compliance with the Law                          | $\sqrt{}$  | Potential impact: Project is stopped  |
|  |  | Prevention:   |
|  |  | Socialization and coordination with multistakeholders.  |

| Access and Equity                        | SGIP<br>Assesment  | Potential impact: Male domination Prevention: Involve female and the youth.   |  |
|--|--------------------|---|--|
| Marginalized and Vulnerable<br>Groups    | SGIP<br>Assesment  | Potential impact: Old people, women, children do not have a role in the activity.  Prevention: The involvement of marginal and vulnerable group into the project. |  |
| Human Rights                             | V                  | The project does not give negative impact for human rights.   |  |
| Gender Equity and Women's<br>Empowerment | SGIP<br>Assesment  | Potential impact: Men domination Prevention: The involvement of women, the youth, and children.   |  |
| Core Labour Rights                       |                    | Potential impact: Children under the age in the adult work. Prevention: Working procedure.  |  |
| Indigenous Peoples                       | V                  | The project does not effect tradition, tribes change, and remove indigenous people.   |  |
| Involuntary Resettlement                 | V                  | The project does not give impact to the tradition, tribes change, and remove indigenous people.   |  |
| Protection of Natural Habitats           | $\sqrt{}$          | The project will give positive impact for fish habitat.   |  |
| Conservation of Biological<br>Diversity  | V                  | The project will give a positive impact for sustainability of ecosystem of mangrove, coral reef, and seagrass meadows.  |  |
| Climate Change                           | V                  | The project will support community adaptation of climate change. The project will not give impact for sustainable emissions.                                      |  |
| Pollution Prevention and<br>Resource     | $\checkmark$       | The project will have an impact to the efficiency of fuel usage and natural resources extraction.   |  |
| Public Health                            | V                  | The project give an impact for the community health improvement by lessening the usage of semi-salted water.  |  |
| Physical and Cultural Heritage           | V                  | The project does not give negative impact on the tribes tradition which exist on the project location.  |  |
| Lands and Soil Conservation              | ESMS<br>Assessment | Potential impact: The making of lake can damage the soil. Prevention: Site feasibility study that will prioritize social and environmental considerations.        |  |

In order to know the social and environment impact for the each concrete implementation on the physical development implementation, it is carried out using ESP parameter table as follows:

| Social and<br>Environmental impact | The explanation of each direct/indirect ESP relates to the project which will be funded by AF project and related facilities. |
|------------------------------------|---|
| of the development                 | ESP problem coverage and project impact:  |
|                                    | Name of activity focus (example: mini lake)     Construction phase:   |
|                                    | A. Actual<br><u>Social Impact</u>   |
|                                    | (1)<br>(2)  |
|                                    | Environmental Impact (1) (2)  |
|                                    | B. Hypothetical Social Impact: (1)  |
|                                    | Environmental Impact: (1)   |
|                                    | Post-Construction phase:  |
|                                    | A. Actual Social Impact (1) (2)   |
|                                    | Environmental Impact (1) (2)  |
|                                    | B. Hypothetical Social Impact: (1)  |
|                                    | Enviromental Impact: (1)  |
|                                    | 2) The focus of the next development activity (etc):  |

And, for SGIP, it will be detailed using ANNEX 4 TO OPG: Gender Policy And Action Plan Of The Adaptation Fund.

The project that will be implemented is estimated contains risks which hamper the success of the goal that has been targeted. Therefore, it needs risks identification all at once the plan to cope it.

| The Focus of Project Activity  | Identification of Risk  | Management Plan   |  |
|--|---|---|--|
| Developing community resilience on natural disaster risk  a) The level of community resilience is not known in detail. |   | Conduct a study of need asessment of community based adaptation   |  |
|  | b) The level of knowledge and ability of community on facing natural disaster are low.  | <ol> <li>Hold training of natural disaster prevention</li> <li>Hold training of management of disaster information center</li> <li>Hold training of early warning system usage</li> <li>Provide capacity building media (modul, leaflet)</li> </ol> |  |
|  | c) There is no natural disaster early warning equipment   | <ol> <li>Conduct EWS need assessement study</li> <li>Provide EWS equipment</li> <li>Arrange SOP of EWS</li> </ol>   |  |
|  | d) The skill of student group and<br>common people in Maratua<br>island on facing natural<br>disaster is low                              | Demonstration of natural disaster prevention  |  |
| Developing community<br>resilience plan on the natural<br>disaster risk in district level                              | a) Local Government of Berau has<br>not had a plan to develop<br>community resilience of natural<br>disaster because of climate<br>change | <ol> <li>Build communication and hold a<br/>meeting</li> <li>Hold program socialization</li> </ol>  |  |
|  | b) Local government does not<br>know the strategy to develop<br>the community resilience<br>relates to natural disaster                   | <ol> <li>Carry out workshop of local action<br/>plan for community resilience</li> <li>Make local action plan for<br/>community resilience</li> </ol>   |  |
| Building pond/mini lake  | a) The conflict of land use for the pond/mini lake and incompatibility of building  | <ol> <li>Conduct building permissions process</li> <li>Develop MoU of land use with the owner</li> <li>Carry out Feasibility Study and make DED</li> </ol>  |  |
|  | b) There is no management of pond/mini lake   | <ol> <li>Hold training of pond/mini lake<br/>management</li> <li>Facilitate the institutional of<br/>pond/mini lake manager</li> </ol>  |  |
|  | c) The opening of some land that may be overgrown by trees  | <ol> <li>Carry out social and environmental<br/>risk study</li> <li>Replanting the land when the<br/>construction has been finished</li> </ol>  |  |
| Developing Floating Net<br>Karamba   | a) The conflict between<br>community member on asset<br>management  | <ol> <li>Facilitate the manager group of<br/>floating karamba</li> <li>Hold training of pond management</li> <li>The involvement of village<br/>government</li> </ol>   |  |
|  | b) The activity of floating karamba<br>gives impact for the habitat and<br>ecology of coral reef/sea grass<br>on the development location | <ol> <li>Carry out baseline study of habitants<br/>condition and biological diversity</li> <li>Conduct monitoring of habitat and<br/>biodiversity</li> </ol>  |  |

| Developing Ecotourism | a) The manager of ecotourism<br>does not understand the way to<br>manage tourism appropriately |    | Hold training of ecotourism management |
|-----------------------|--|----|--|
|                       | b) The bad management of waste<br>gives impact on the decrease of<br>tourist turnout number    | 1. | Build waste management facility        |

Furthermore, it needs an analyses to observe the social and environmental impact of physical construction which conducted using ESP parameter table. The analyses is presented on the table below:

# Social and Environmental Impact of Construction (Dampak Sosial dan Lingkungan Pembangunan -ESP)

The explanation of each ESP problem is directly/indirectly not related to the project that funded by AF Project and the related facilities.

The scope of ESP Problem and the project impact:

3) The focus name of activity: the development of action plan and capacity of Community Resilience.

#### Impact:

- (3) Community readiness on facing disaster
- (4) Increasing community knowledge and ability on facing natural disaster
- 4) Focus Name of Activity: the development of local resilience action plan

#### Impact:

- (1) The support of local policy toward disaster response action
- (2) The support of local policy on encouraging community resilience for disaster action response
- (3) Increasing local knowledge and ability on facing natural disaster
- 5) Focus Name of activity: the development of local resilience action plan **Impact:**

# (1) The support of local policy of disaster response action

- (2) The support of local policy on encouraging community resilience for disaster action response
- (3) Increasing local knowledge and ability on facing natural disaster
- 6) Focus Name of activity: the building of pond/mini lake

#### Impact:

#### **Pre Construction and Construction Stage**

C. Actual

## Social Impact

- (3) Fulfillment of fresh water for the community need of consumption and production
- (4) The opening of job vacancy for the construction

#### **Environmental Impact**

- (1) The decrease of community land in order to be used for the pond/mini lake location
- (2) There is noisy sound because of the using of construction equipments
- (3) There are organic and inorganic waste during the construction process

#### D. Hypothetical

#### **Social Impact**:

(2) Social conflict because of land use

#### **Environmental Impact**:

- (2) The damage of land around the construction location
- (3) The decrease of water reserve because of construction

#### **After Construction Stage:**

## B. Hypothetical

#### **Social Impact:**

- (1) Social Conflict of posession claim of asset
- (2) The arise of land management based production activities because of the existence fresh water source

# **Environmental Impact:**

- (1) The provision of sufficient fresh water for the community
- 7) Activity Focus: the making of floating karamba

#### Impact:

#### A. Actual

#### **Social Impact**

- (1) The increase of community income
- (2) The reduction of fuel consumption to catch fish
- (3) The easier provision of community food source
- (4) The opening of job vacancy for breeding and growing the fish

#### **Environmental Impact**

- (1) The decrease of fish natural exploitation
- (2) There is noisy sound of construction equipment
- (3) There are organic and inorganic waste during the construction

#### B. Hypothetical

### **Social Impact**:

(1) Social conflict of floating karamba asset management

#### **Environmental Impact:**

- (1) The damage of ecosystem around the location of floating karamba installation
- (2) Environmental pollution because of the use of the certain fish feed
- (3) The decrease of pollution and consumption of boat fuel to catch fish
- 8) Activity focus: ecotourism management and the construction of waste managemen facility

#### **Impact:**

#### A. Actual

#### **Social Impact**

- (1) Community capacity building on managing ecotourism
- (2) The waste from tourism and non tourism activities is managed
- (3) Environmenal health and cleanliness of community and tourist more increase.
- (4) The openig of job vacancy in the construction

#### **Environmental Impact**

- (1) The decrease of community land for the location of waste management facility
- B. Environmental cleanliness is better Hypothetical

#### **Social Impact:**

- (1) The increase of tourist turnout number
- (2) The increase of community income
- (3) Social conflict of asset claim

#### **Environmental Impact:**

- (1) The damage of land around the construction
- (2) The decrease of water reserve for the construction

#### The potency of the project cumulative impact covers:

- A. The potency of social important impact (hypothetical)
- Social conflict

In general, the target of the project that will be the main beneficiaries are all the communities in Maratua's small island. However, the project that will be implemented can not cover all of the communities. Therefore, it might bring up a gap that makes negative attitude and negative view toward either the direct beneficiaries or the project implementation.

- The increase of adaptation and resilince skill
  Overall, the project will support the increase of community adaptation and resilience in
  Maratua's small island for either direct beneficiary or the community who affected.
- The increase of income

On the whole, the project will give the increase of income for either the direct beneficiary or affected communities, especially activities relate to livelihood.

- The development of human index quality
  Overall, the project will give a development of human index quality from adaptation and resilience, life skills, enterpreneurships, and the institutional sides.
- B. The potency of the important impact of environment (hypothetical)
- The increase of environment quality
  On the whole, the project will impact on natural resources usage that is more efficient and waste management. Furthermore, in cumulative the project will influence the changes on ecosystem level either land or waters that have an effect in carbon release value and climate regulation. Therefore, this project also gives contribution on the reduction of green house gas emission.
- The decrease of environment quality
  As the residue of physical construction, the project will make ecological changes (in micro scale) in the locations of infrastructure placement and floating karamba. The residue is in the form of the change of land use and it might be water pollution because of feeding in the karamba.

Activities which help on avoiding or minimizing the negative impact of the project are:

- (1) Project socialization whether in subdistrict, village, and district level in order to prevent hypothesize of social conflict;
- (2) The set up of the Institutional of managers
- (3) The set up of tandard and procedure of EWS;
- (4) Several training
- (5) Study and SGIP Monitoring;
- (6) The arrangement of environmental permit
  - SPPL (Satemet Letter of Environment management) for pond/mini lake installation;

As the choice to reduce the risk relates to social and environment problem caused by the project, Consortium JAVLEC Indonesia will conduct studies and monitoring, which are:

- (1) Studies and monitoring of habitat and biodiversity in the project location;
- (2) Studies and monitoring of social and environmental impact with ESP
- (3) Arrange Feasibility Study document and Detail Engineering Design for the development of the pond/mini lake.

The key stakeholders that involved in the project are:

- (1) The Regent of Berau district
- (2) BAPPEDA (Development Planning Agency) of Berau district that involved in the construction plan

| (3) | PUPR office (Public Works and public housings office) – that will be involved in the |
|-----|--|
|     | construction and maintenance of the pond/mini lake Tourism Office – that will be     |
|     | involved in the development of ecotourism;   |

- (4) Environmental Agency in district level (BLH Badan Lingkungan Hidup) that will be involved in the issuance of environmental permit such as SPPL (Statement Letter of Environment Management) and UKL-UPL (Letter of Environmental Management Effort and Environmental Monitoring Effort)-;
- (5) Sub-district government that will have a role on giving support and facilitation of policy in sub-district level; and
- (6) Village government that will have a role on giving support and facilitation of policy in village/kampung level.

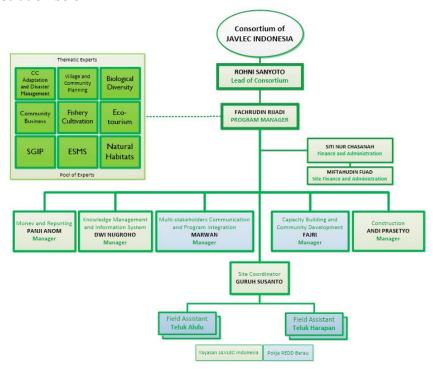
## PART III: IMPLEMENTATION ARRANGEMENTS

## **A.** Describe the arrangements for project / programme implementation.

This project will be managed together in a consortium which the member are JAVLEC Indonesia Foundation and REDD working group of Berau. Those two institutions will palce personnel to actively involve in this project based on the each competence. Briefly, the implementer of this project will be 24 persons-consist of:

- One person as the person in charge of running of the project on behalf of the consortium.
- One person as a Program Manager who will take the responsibility to manage and coordinate all the activities in the project to achieve the goal and expected result.
- Two persons as finance and administrative staff who will responsible toward the smoothness of administrative process and fund transaction to support the project implementation smoothness-consist of a Finance and Administrative Manager and a Site Finance and Administrative.
- Six persons of Managers that will responsible toward the activities implementation appropriate
  with their own competence and job descriptions-consist of Community Empowerment and
  capacity bulding Manager, Cunstruction Development Manager, Monitoring and Evaluation
  Manager, and Information and Knowledge Management Manager.
- A person as Site Coordinator who responsible to coordinate the field assistant and activities in the field.
- Nine specialists who will responsible toward the activities implementation based on their own competence-consist of Adaptation and Disaster Risk Reduction Specialist, Community and Planning Specialist, Biological Diversity Specialist, Eco-tourism specialist, Fishery Farming Specialist, Community Bussines specialist, SGIP specialist, ESMS specialist, and Natural Habitats specialist.
- Four Field Assistants who will responsible on the direct assistance work to the commuity in the target village/*kampung*.

The organization structure of implementer and core personnel who will be involved in the project is shown in the illustration below:



The involvemet of each institution-here are the position and the roles-can be seen from the difference of color in the structure of implementer organization.

**B.** Describe the measures for financial and project / programme risk management. Pengelolaan resiko proyek/program dan keuangan akan dilakukan sebagaimana terlihat pada tabel berikut ini:

| Category    | Risk Potency  | Risk<br>Level | Management Plan  |
|-------------|---|---------------|--|
| Finance     | Low Cost Efficiency   | Low           | Cost efficiency will become one of the item on the periodic monitoring and evaluation that will be seen from the implementation which is consistent with the project project budget plan.  |
|             | Inaccuracy/tardi<br>ness of project<br>fund transfer<br>process   | Middle        | In certain amount, JAVLEC Indonesia Foundatio will prefinance the project cost to cover the strategic activities which has to be implemented based on the time schedule. Then, the fund will be claimed using reimbursement mechanism.   |
| Environment | Waste from tourists   | High          | Basically, eco-tourism also gives environment education to the tourists as userrs. Eco-tourism package will be designed to include waste problem which often happens in natural toursim bussines- as an important point on the tourism management.   |
|             | The environment impact as the result of construction development  | Middle        | Every construction development-in this case is the construction of mini lake and floating net karamba-will always be followed by Feasibility study (FS) and Detail Engineering Design (DED)-which then will be analyzed using ESMS study (Envionmental and Social Management Plan). ESMS study |
| Social      | Social impact<br>as the result of<br>construction<br>development  | Middle        | will result environment and social management planning which will be applied in the project implementation.  |
|             | The occurs of social conflict as the impact of not all villages in Maratua island become the project site | Low           | The project will involve 2 (two) other villages-which are Bohesilian and Payung-Payung village-into the activities which run.  |
| Institution | The minimal of ultistakeholder involvement  | Middle        | This project-specifically-places communication manager Multistakeholder and Integration Program-that will continually try to involve multistakeldoer and synergize with the similar program.   |
|             | The broke up of the project implementer consortium  | Low           | JAVLEC Indonesia consortium and REDD working group of Berau have a partnership experience in a project and some activities. A consortium meeting will be periodically held to discuss and mitigate various problems which might occur.   |

**C.** Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

This project will be started with ESMS study (Environmental and Social Management System). ESMS study will result an environmental and social management plan which will be applied in the project implementation. Nevertheless, based on the slight screening-environment and social risk management which predicted will happen-in line with the environmental and social policy of adaptation fund-is as seen on the table below:

| Principle Risk Potency Management Plan  |   |
|---|---|
| Principle 1. Construction  Compliance with the Law  Construction  Development  The construction of mini lake and floating net karamba rules which applied-included to provide the appropriate or AMDAL. JAVLEC Indonesia has had experiences or construction development on project site –in this case i plants, ice cube factory, and Mangrove Informantion Cerebian construction. | permission-such as SPPL<br>n the arrangement of<br>s solar energy power |

| Principle 2. Access and Equity                             | Injustice access                                      | The project will carry out a stakeholder mapping to find out the potential beneficiaries, rivals, disputants, marginalized, or vulnerable people. Then, risk analysis will identify the possibility of the carelessness of rights and basic service-  |
|--|---|---|
|  |   | and the occur of injustice.   |
| Principle 3. Marginalized and Vulnerable Groups            | The univolvement of vulnerable and marginalized group | In general, this project will focus on the vulnerable and marginalized group-<br>especially poor family, women group, and the youth. In initial stage, the project<br>will also hold gender and social study-which will result SGIP document (Social and<br>Gender Integration Plan).<br>Various plans which written in the document-then-become part of overall project<br>implementation.   |
| Principle 4.<br>Human Rights                               | Human Rights<br>Violations                            | This project will avoid the possibility of human rights violations. ESMS study and SGIP study will include human rights policy-such as Act No. 39/99 about human rights and the various convention/pacta which are relevant and have been ratified by Indonesian government—such as a Convention on the Elimination of All Forms of Discrimination against Women, International Convention on the Elimination of All Forms of Racial Discrimination, Convention on the Rights of Persons with disabilities,etc.   |
| Principle 5. Gender Equality and Women's Empowerment       | Gender inequality                                     | Women group is one of the main group target in this project. In initial stage, this project will also carry out gender and social study-which will result an SGIP document (Social and Gender Plan). Various plans are written in the document-then-become the part of all project implementation.  |
| Principle 6.<br>Core Labour<br>Rights                      | Labor basic rights is not assured                     | This projecy will always pay attention on the labor basic rights—either who involves as the staff or in construction development work. The labor basic rights covers the rights of proper pay, the rights of social assurance, the rights of benefolent, the rights of rest time and leave time, the rights of holiday and overtime fee, the rights of freedom of association, the rights of reproductions, the rights of worship, the rights to direct action, the rights of safety and healthy work, the rights to get equal treatment, and the rights of severance pay if fired. |
| Principle 7.<br>Indigenous<br>Peoples                      | The carelessness of local people and/or indigeneous   | This project will focus to empower the local community, but not for indigeneous people. The strategy of local involvement will be based on ESMP document and SGIP document. JAVLEC Indonesia Foundation has had experiences on involving local community on the project site construction development-so that the project implementation can run smoothly, received by the local community, and can strengthen social capital.  |
| Principle 8.<br>Involuntary<br>Resettlement                | The remove of indigeeous people                       | This project will have a small chance to remove indigeneous people.   |
| Principle 9. Protection of Natural Habitats                | The unprotected natural habitat                       | This project will have an impact for the protection of mangrove ecosystem, coral reef, and segrass meadows. The monitoring of habitat will be carried out periodically as part of monitoring and evaluation activity.   |
| Principle 10. Conservation of Biological Diversity         | The unprotected flora and fauna types diversity       | This project will have an impact for the protection of flora and fauna diversity on mangrove ecosystem, coral reef, seagrass meadows. The monitoring of flora and fauna diversity will be carried out periodically as part of monitoring and evaluation. Activity.  |
| Principle 11.<br>Climate<br>Change                         | The occur of carbon emmission                         | Adaptation scheme of climate change which will be carried out through this project will contribute toward the decrease of carbon emmission. This study will be carried out to count the amount of the decrease of carbon emmission that can be donated through results or output which can be achieved by the project implementation.   |
| Principle 12. Pollution Prevention and Resource Efficiency | The occur of pollution and resources inefficiency     | The various adaptation schemes which wil lbe held through this project-are expected can give for the increase of natural resources effiiciency-such as water on the construction of mini lake, fish on the procurement of floating net karamba, and environment on the tourism development. Pollution prevention –either waste, chemical subtances, sound,etc-will be avoided as minimuml as possible in this project. Pollution prevention strategy will be shown in ESMP document.  |

| Principle 13.<br>Public Health                     | Public health is endangered     | This project has a small chance to give a treath for public helth public or local people.  |
|--|---------------------------------|--|
| Principle 14. Physical and Cultural Heritage       | Cultural inheritance            | It is not found cultural inheritance on the target site-which can be threatened by this project implementation.  |
| Principle 15.<br>Lands and<br>Soil<br>Conservation | Soil conservation is threatened | In this project, mini lake construction has a relation to the possibility of the threatened of soil conservation. So, the costruction of mini lake will be followed by Feasibility Study and Detail Engineering Design-which then be analyzed using ESMS study ( <i>Environmental and Social Management System</i> ). ESMS study will result environment and social management plan which will be applied into the project implementation. |

# **D.** Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

Monitoring and Evaluation has a sustainable function which uses systemic data collection and data analysis to give information about the project progress to the output and goal/target to the project stakeholder. This information is ver important-either from accountability side or to inform the implementation and learning sector. This project will hold monitoring and and evaluation once in three months. That periodic monitoring and evaluatio will done by an expert personnel – by doing a visit to the project site, discussing with the beneficiaries, and directly observing the project achievement in site level.

The data and informtion on the monitoring implementation will be also from some references that relate to the project implementation-such as project proposal, report-either montly report or three months report, project publication, etc.

The project monitoring and evaluation plan will be also related to the indicators of Results Framework of the Adaptation Fund—as registered on Part III.F. Budget detail for monitoring and evaluation activity is USD 77,792 (seventy seven thousands and seven hundreds ninety two dollars) and has been part of project budget plan.

**E.** Include a results framework for the project proposal, including milestones, targets and indicators.

Attached.

**F.** Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

The reference of Adaptation Fund's framework has been put into **Alignment of Project Objectives/Outcomes with Adaptation Fund Results Framework** as follows:

| Project Objective(s)[1]  | Project Objective<br>Indicator(s)                            | Fund Outcome  | Fund Outcome<br>Indicator  | Grant<br>Amount<br>(USD) |
|--|--|---|--|--------------------------|
| Developing<br>Community<br>Resilience to<br>Adapt to<br>Climate Change<br>in Maratua | Presence of community capacity on climate change adaptation; | Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and  | 2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased | 22.154                   |
|  |  | environmental losses  | 2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased | 76.365                   |
|  | Presence of plans and budgets on adaptation                  | Outcome 7: Improved policies and regulations that promote and enforce resilience measures                         | 7. Climate change priorities are integrated into national development strategy   | 22.700                   |
|  | Presence of institution support                              | Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas | 6.1. Percentage of households and communities having more secure access to livelihood assets                               | 490.223                  |
|  |  | Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets      | 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress                           | 40.258                   |
|  |  | Outcome 1:  Reduced exposure to climate-related hazards and threats   | Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis                        | 67.169                   |
|  | Knowledges dan information sytem availibilty                 | Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level | 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses  | 77.792                   |

| Project<br>Outcome(s)  | Project Outcome<br>Indicator(s)  | Fund Output  | Fund Output<br>Indicator  | Grant<br>Amount<br>(USD) |
|--|--|--|---|--------------------------|
| Presence of community capacity on climate change adaptation; | Study of vulnerable and disaster risk resilience conducted   | Output 2:<br>Strengthened capacity of<br>national and sub-national<br>centres and networks to<br>respond rapidly to extreme<br>weather events        | 2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)  | 22.154                   |
|  | Presence of Disaster management document  Presence of community action plans  Presence of villages contingency plan    | Output 2:<br>Strengthened capacity of<br>national and sub-national<br>centres and networks to<br>respond rapidly to extreme<br>weather events        | 2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)  | 76.365                   |
| Presence of plans and budgets on adaptation                  | Presence of district action plan conducted  Community disaster response conducted                                      | Output 7:<br>Improved integration of<br>climate-resilience<br>strategies into country<br>development plans   | 7.2. No. of targeted development strategies with incorporated climate change priorities enforced  | 22.700                   |
| Presence of institution support                              | Developing water reservoir for community   | Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability | 4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale) | 40.258                   |
|  | Conduct community based ecotourism  Floating net keramba for community developed  community safety procedure developed | Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability          | 6.1. Percentage of households and communities having more secure access to livelihood assets  | 490.223                  |
|  | Climate/Weather information system developed  Early warning system for community developed                             | Output 1.2: Targeted population groups covered by adequate risk reduction systems Output 1.1: Risk and vulnerability                                 | 1.2.1. Percentage of target population covered by adequate risk-reduction systems  1.2. No. of early warning systems (by scale) and                   | 67.169                   |
| Knowledges dan information                                   | Community Knowledges   | assessments conducted and updated  Output 3:   | no. of beneficiaries covered  3.1 No. of news outlets in  |                          |
| sytem availibility   | dan information sytem develop  | Targeted population groups participating in adaptation and risk reduction awareness activities   | the local press and<br>media that have<br>covered the topic   | 77.792                   |

<sup>[1]</sup> The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

**G.** Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs. Attached.

H. Include a disbursement schedule with time-bound milestones. Attached.

### **PART IV:**

# ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

# A. Record of endorsement on behalf of the government

Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

| H. Agus Tantomo               |                        |
|-------------------------------|------------------------|
| Vice Regent of Berau District | Date: (April, 4, 2017) |

Attached.

# **B.** Implementing Entity certification

Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (President P.13/Menlhk/Setjen/OTL.0/1/2016; Decree No. 16 vear 2015; P.33/Menlhk/Setjen/Kum.1/3/2016; Indonesia Intended Nationally Determined Contribution/INDC; COP 21 Paris Agreement signed by Government of Indonesia; Book and Map of Information System of Vulnerability Index Data (SIDIK); Permen-KP No. 2 year 2013; Climate Change Adaptation National Action Plan) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Monica Tanuhandaru

Executive Director of Partnership for Governance Reform in Indonesia (Kemitraan) Implementing Entity Coordinator

Date: August, 6, 2018

Tel. and email: +62-21-22780580;

Monica.Tanuhandaru@kemitraan.or.id

Project Contact Person:

Dewi Rizki

Tel. And Email: +62-21-22780580; Dewi.Rizki@kemitraan.or.id



# **Project Formulation Grant (PFG)**

Submission Date: August 6th, 2018

Adaptation Fund Project ID:

Country: Indonesia

Title of Project/Programme: Developing Community Resilience to Adapt to

Climate Change in Maratua

Type of IE (NIE/MIE): NIE

Implementing Entity: Kemitraan – The Partnership for Governance Reform

Executing Entity: JAVLEC Foundation

# A. Project Preparation Timeframe

| Start date of PFG      | 1 September 2018 |
|------------------------|------------------|
| Completion date of PFG | 1 February 2018  |

# **B.** Proposed Project Preparation Activities (\$)

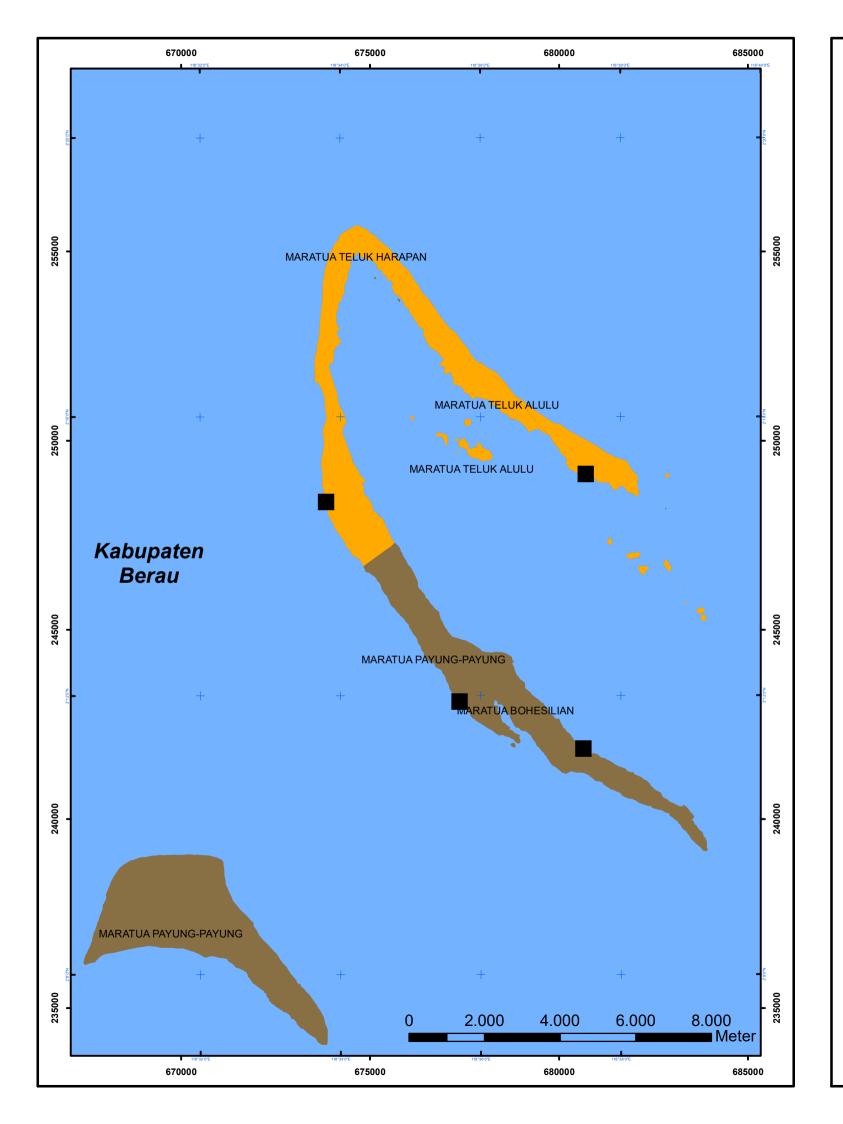
Describe the PFG activities and justifications:

| List of Proposed Project Preparation Activities                   | Output of the PFG Activities   | USD Amount |
|---|--|------------|
| Data collection for baseline and analysis for each component      | Collected data required to set up the basis for argument formulation and program justification in the proposal.  | 12,375     |
| Travel and meetings required for data collection and consultation | Confirmation of assumptions and situation on the ground before program document finalized  | 3,375      |
| Expert hiring for proposal writing                                | Assist Kemitraan in writing and use of collected baseline data to justify program and enhance the proposal.  | 10,875     |
| Focus Group Discussion with Multistakeholders                     | To receive feedback and input on the Goal, Objective, Outcome, and Output of the proposal which to be submitted to AF, so as to ensure it is in line with the national programs and strategies of climate change adaptation. | 3,375      |
| Total Project Formulation Grant                                   |  | 30000      |

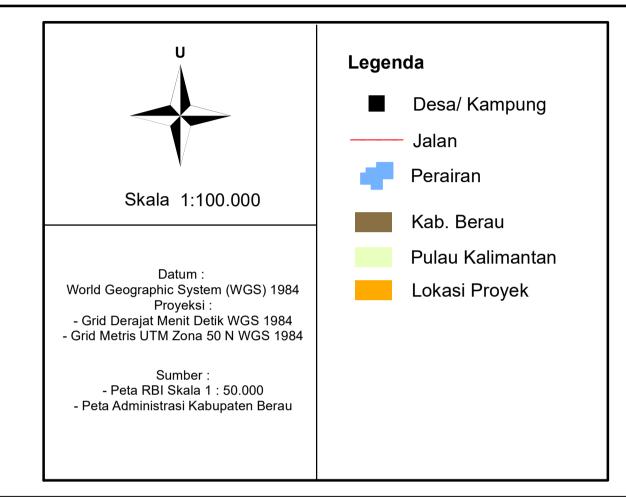
# C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

| Implementing Entity Coordinator, IE Name | Signature | Date<br>(Month,<br>day, year) | Project<br>Contact<br>Person | Telephone          | Email Address              |
|--|-----------|-------------------------------|------------------------------|--------------------|----------------------------|
| Monica<br>Tanuhandaru                    | Men       | 06 August<br>2018             | Dewi<br>Rizki                | +6221-<br>22780588 | dewi.rizki@kemitraan.or.id |
|  |           |                               |                              |                    |                            |



# PETA LOKASI PROYEK ADAPTASI - KEMITRAAN DESA TELUK ALULU - DESA TELUK HARAPAN KEC. MARATUA, KAB. BERAU, PROV. KALIMANTAN TIMUR











YAYASAN JAVLEC INDONESIA



# Letter of Endorsement by Government



July 31st, 2017

To:

The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat Email: Secretariat@Adaptation-Fund.org

Fax: 202 522 3240/5

Subject: Endorsement for "Developing Community Resilience to Adapt to Climate Change in Maratua"

In my capacity as designated authority for the Adaptation Fund in Indonesia, I confirm that the above regional project/programme proposal is in accordance with the government's regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the District of Berau – East Kalimantan.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by Yayasan Javlec Indonesia and executed by local executing entity.

Sincerely,

HARRAM, S.Pd, M.M BUPATI BERAU